
A NEW SPECIES OF *RUELLIA* (ACANTHACEAE) FROM WESTERN MEXICO

Ruellia L., of tribe *Ruellieae* Nees emend. Bremerkamp (1944), is a tropical and subtropical genus of 200 species (Long, 1964). Its variation is impressive and its taxonomy complex. Lindau's (1895) circumscription is adopted here, and its unifying characters are contorted aestivation of the corolla lobes; didynamous stamens with muticous, equal or nearly equal two-celled anther lobes; and spheroid or ellipsoid, three- or more-porate, reticulate, and spinulose or banded pollen grains.

The primary centers of diversity of the genus are Indo-Malaya, Brazil, Africa, Mexico, and Central America (Long, 1970). In Mexico there are about 40 species of *Ruellia*, many of which occur locally, which suggests evolution by fragmentation (Ramamoorthy & Lorence, 1987). The variation in shape, size, and color of the corolla is very pronounced, indicating strong adaptive radiation to pollen vectors, which has led to definable natural constellations of infrageneric species groups. These deserve sectional ranks, but their recognition awaits revisionary studies (Ramamoorthy, in prep.). Among these is the chiropterophilous group: *Ruellia bourgaei*, *R. coulteri*, *R. palmeri*, *R. pulcherrima*, *R. jaliscana*, and the new species described below. The bats pollinating some of these are *Leptonycteris nivalis* and *Anoura geoffreyi*, both of the subfamily *Glossophaginae*.

Ruellia sarukhaniana Ramamoorthy, sp. nov.
TYPE: Mexico. Michoacán: Coalcomán, S of Naranjillo, 1,200 m, in woods, 24 Nov. 1938, G. Hinton et al. 12659 (holotype, GH).
Figure 1.

Ruellia jaliscanae Standley affinis a qua foliis oblanceolatis differt.

Suffrutescent herbs to 1 m high. Stem distinctly 4-angled, with numerous cystoliths; angles reddish brown. The leaves 15–22 cm long, 2–3.8 cm wide, oblanceolate, acuminate at tip, narrowed and decurrent onto the 1-cm-long petiole, sinuately dentate along margin, chartaceous, venation (12–14 pairs) actinodromous, pilose above with short, multicelled, white hairs, pubescent along nerves below, cystoliths numerous. Inflorescence terminal and

axillary, cymose-panicles, the peduncle and its branches densely tomentose with white hairs, interspersed with glandular hairs. Leaves subtending inflorescences reduced, bractlike, to 8 cm long, to 0.05 cm wide, oblanceolate. Bracts to 4.2 cm long, narrowly oblanceolate, tomentose with white hairs; bracteoles linear to subulate, glandular hairy. Pedicel to 2 cm long, tomentose glandular hairy. Calyx 3.2 cm long, deeply subequally 5-lobed with 2 lobes longer than the rest, the lobes to 2.2 cm long, 0.3 cm wide, linear, villous with glandular hairs. Corolla to 7 cm long (the tube 3.5 cm long, 4 mm wide), yellowish, the throat 2.5 cm long, 1 cm wide, the lobes 1 cm long, 1 cm wide. Stamens 4 in pairs, the filaments 1.5 cm long; anthers 0.7 cm long. Ovary 6 mm high, glabrous, the nectariferous disc surrounding ovary 2 mm high, fleshy, the style 5.7 cm long, the stigma of 2 flat lobes. Seeds not known.

The species is named after Dr. José Sarukhán Kermez, formerly Director of the Instituto de Biología and currently coordinator of scientific research in the National University of Mexico.

Ruellia sarukhaniana is similar to *R. jaliscana* with which it shares the glandular hairy, linear-lanceolate calyx lobes and its corolla form and branched inflorescence. The new species differs from the broadly ovate leaved *R. jaliscana* by having oblanceolate leaves.

The two are allopatric: *Ruellia jaliscana* is restricted to northwestern parts of the transmexican volcanic chain in the state of Jalisco, and *R. sarukhaniana* is found in the Coalcomán area, the northernmost parts of the Sierra Madre del Sur. Their similarities and affinities suggest a possible common origin for the two species, with allopatry contributing to their differentiation.

I thank Drs. D. Wasshausen (US) and T. Daniel (CAS) for comments on an earlier version of the typescript, and Fernando Chiang (MEXU) for the Latin diagnosis.

LITERATURE CITED

BREMEKAMP, C. E. B. 1944. Materials for a monograph of the Strobilanthesinae (Acanthaceae). Verh. Kon. Ned. Akad. Wetensch., Afd. Natuurk., Tweede Sect. 41: 1–306, pls. 1–6.



FIGURE 1. *Ruellia sarukhaniana*. *Photograph of holotype*.

LINDAU, G. 1895. Acanthaceae. In: Engler & Prantl, *Die Natürlichen Pflanzenfamilien* 4(3b): 274–354.

LONG, R. W. 1964. Biosystematic investigations in south Florida populations of *Ruellia* (Acanthaceae). *Amer. J. Bot.* 51: 842–852.

—. 1970. The genera of Acanthaceae in the southwestern United States. *J. Arnold Arbor.* 51(3): 257–309.

RAMAMOORTHY, T. P. & D. H. LORENCE. 1987. Species

vicariance in the Mexican flora. *Adansonia* 2: 167–175.

—T. P. Ramamoorthy, *Instituto de Biología, Apartado Postal 70-233, Ciudad Universitaria, Delegación Coyoacán, México D.F. 04510, México*.